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ABSTRACT

The purpose of this module is to introduce students (grades 7-8) to the concept of change as reflected in changes of lifestyle. The module is comprised of three major sections. Section 1 examines family roles in earlier Amerindian society (low technology) and society today (high technology). Section 2 examines the role and purpose of education, again comparing/contrasting the two cultures. Section 3 examines how lifestyle needs impact on land, its resources, and other people. Within each section are readings, student activities, dilemma discussions, and simulations. Dilemmas are brief stories posing a critical decision to be made by a main character. This decision revolves around conflicts between two or more moral/ethical issues (as identified by Kohlberg) presented in the situation, and it is the moral/ethical implication that provides the thrust for later student discussions. Preceding each dilemma are readings/case studies providing background information regarding issues in the dilemma. Questions are also provided to stimulate thinking about the issues and generate discussions. The module may be used as a separate unit of study, as a mini-course, or incorporated into such subject areas as social studies, history, general science, or language arts. (JN)

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PREPARING FOR TOMORROW'S WORLD

Technology and Changing Lifestyles

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Preparing for Tomorrow's World
An Interdisciplinary Curriculum Program

Coastal Decisions: Difficult Choices
Energy: Decisions for Today and Tomorrow
Future Scenarios in Communications
Space Encounters
Technology and Changing Life-Styles
Food: A Necessary Resource
Perspectives on Transportation
Future New Jersey: Public Issues and the Quality of Life
People and Environmental Changes
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PREPARING FOR TOMORROW'S WORLD

Technology and Changing Lifestyles

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PREFACE

We live in an exciting, rapidly changing, and challenging world—a world highly dependent upon science and technology. Our world is changing so rapidly that we sometimes fail to recognize that much of what we today take for granted as common, everyday occurrences existed only in the imaginations of people just a few short years ago. Advances in science and technology have brought many dreams to fruition. Long before today's school children become senior citizens, much of today's "science fiction" will, in fact, become reality. Recall just a few accomplishments which not long ago were viewed as idle dreams:

- *New biomedical advances have made it possible to replace defective hearts, kidneys and other organs.*
- *The first air flight at Kitty Hawk lasted only a few seconds. Now, a little over half a century later space ships travel thousands of miles an hour to explore distant planets.*
- *Nuclear technology—of interest a few short years ago because of its destructive potential—could provide humankind with almost limitless supplies of energy for peace-time needs.*
- *Computer technology has made it possible to solve in seconds problems which only a decade ago would require many human lifetimes.*
- *Science and technology have brought us to the brink of controlling weather, earthquakes and other natural phenomena.*

Moreover, the changes which we have been experiencing and to which we have become accustomed are occurring at an increasingly rapid rate. Changes, most futurists forecast, will continue and, in fact, even accelerate as we move into the 21st Century and beyond. But, as Barry Commoner has stated, "There is no such thing as a free lunch." These great advances will not be achieved without a high price. We are now beginning to experience the adverse effects of our great achievements:

- *The world's natural resources are being rapidly depleted.*
- *Our planet's water and air are no longer pure and clean.*
- *Thousands of plant and animal species are threatened with extinction.*
- *Nearly half the world's population suffers from malnutrition.*

While science and technology have given us tremendous power, we are also confronted with an awesome responsibility: to use the power and ability wisely, to make equitable decision tradeoffs, and to make valid and just choices when there is no absolute "right" alternative. Whether we have used our new powers wisely is highly questionable.

Today's youth will soon become society's decision-makers. Will they be capable of improving upon the decision-making of the past? Will they possess the skills and abilities to make effective, equitable, long-range decisions to create a better world?

To the student:

This module has been prepared to help you—the student and future decision maker—function more effectively in a rapidly changing world. Other modules in the *Preparing for Tomorrow's World* program focus on additional issues of current and future importance.

To the teacher:

It is our belief that this module—and indeed the entire *Preparing for Tomorrow's World* program—will help you the teacher prepare the future decision-maker to deal effectively with issues and challenges at the interfaces of science/technology/society. It is our belief that the contents and activities in this program will begin to prepare today's youth to live life to the fullest, in balance with Earth's resources and environmental limits, and to meet the challenges of tomorrow's world.

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SECTION I:
Family

Reading 1 — Family Concepts And The Traditional Indian

In the days of the buffalo, a Plains Indian camp was always set in a circle. All sacred things were round: the sun, the moon and the earth's horizon. This idea of continuous circle reflected the way the people lived and behaved towards one another. The teepee was round, allowing each person to face one another and to see and clearly communicate with each other. The camp circle was also necessary for defense in case of stampede or raids. All these things were part of a Great Power and formed a harmonious world — a continuing circle or cycle.

The Plains way of life revolved around a deep-rooted, extended family kinship society. It consisted of large families with many relatives, spanning several generations. Family members, young and old, were equally important and equally respected. Each person was highly valued and protected by the family.

Do you feel our way of life today resembles the Plains way of life as described thus far? What are your reasons?

A person felt fondness towards all family members, distant or close, regardless of age, sex, or one's personality. The camp was full of keen humor, self discipline, sharing and mutual aid. Family members depended on one another and no one was ever refused aid or abandoned by this extended family. However, one was expected to be in good standing with the teachings of the Great Spirit, and in harmony with the universe in which one was a part. One learned to live with humility. One never considered oneself more important than another person or another object, not even more important than an ant on the sand. "In them all things are One: the rock, the cloud, the tree, the buffalo, the man." (Bad Arm, Sioux) All beings and all things were brothers to the Indian; all were part of the Great Power and the universe.

Each person in the Indian community was responsible to the immediate family, the village, the clan and then the tribe, in that order. The camp of one clan could be part of a larger circle, more circles of teepees could be added, and eventually it may become a large group of encampments — the entire tribe. In this great circle, each and every person was governed by a traditional rule — good behavior.

What are some traditions or rules that govern our society today?

One's duties in the family were determined by one's age and sex. However, everyone worked together for the benefit of the family, distant relatives or friends of the tribe. No one was ever left out of any activity because of one's age or sex (except in special tribal societies). Infants, children, adults and the elderly all talked to one another freely as well as played and worked together, side by side. Everyone took part in celebrations, prayers and special events. Being part of the family meant sharing and participating in all ways. Every task and action served the needs and goals of the family.

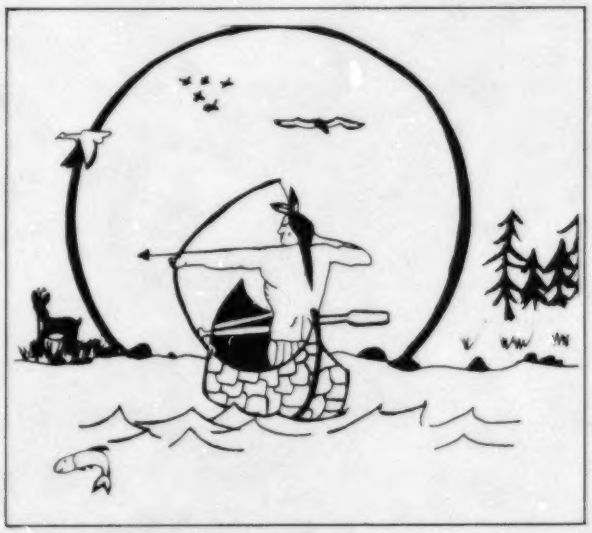
Growing Up The Traditional Indian Way

The life of a young boy, man or elderly male was a constant exposure to daily dangers. It was a life of hunting and defense, a necessity for survival. Little

else could be expected of a male in the way of other work. Most of his time was spent hunting for food and defending his people. The young Plains Indian boy learned through careful imitation of the older and more experienced hunters, warriors, counselors, leaders or medicine persons.

As soon as they were able, young boys were encouraged to learn to swim, run and ride. Their early games provided practice for the knowledge and skills needed later on in life. These lessons of skill in hunting and defense, taught by the adults, meant survival for them and their people. They learned by watching, pretending, and eventually doing what their teachers taught. They captured "game" with toy bows and arrows. The "game" was usually a tiny carved, wooden buffalo, elk or caribou studded with grass. These were the same toys used as targets for practice with the bow and arrow. Sometimes the young boys managed to come home proudly displaying small prey caught with their toy bows and arrows.

When the Plains Indian youth was ready to become a man, he helped prepare a sweat lodge to pray and purify himself. Then he went into a small pit or leaned against a tree on a lonely hilltop, naked, exposed to the



Hunting for Survival

elements, and without food and water. He would usually wait for three or four days for a Vision. The trials of his Vision Quest tested his bravery and courage. He would wait in a state of half-wakefulness and hunger until he had a dream which would help him discover his adult name and role in life. His dream was then interpreted by the medicine person of his village. After receiving his first medicine bundle, he would devote his life to living up to his dream and the traditions of his people.

How does Indian boyhood compare with boyhood today?

How is it the same? Different?

The Indian women of the Plains worked together with the female children and the elderly. Out of necessity, females carried the burden of work to provide for

Young Girls Learn From The Elders

the daily needs of the tribe. They built the dwellings, packed and unpacked when moving camp, made utensils, tanned hide, sewed, and cooked, gathered and preserved food. In addition, they were mothers to all the children.

The upbringing of a young Sioux girl was managed carefully by the elder grandmother, mother, second mother, aunts, cousins, peers and all other females. She soon learned that moderation, poise, reserve, and courtesy were the accepted patterns of behavior.

A girl copied the ways of the women who managed the lodge in their quiet, gentle way. From them she could learn to be a mother, a healer, herbalist or even a holy one who gave personal advice. She gained knowledge about birth, life and death from direct experience. Through watching and doing, she soon learned about the Plains Indians' way of life.

She did not go on a Vision Quest such as that of the male. She did have a puberty ceremony, conducted mainly by the grandmother of the lodge or teepee. Then she prepared for her coming of age by learning additional skills and duties from the more experienced, older women.

How does Indian girlhood compare with girlhood today?

How is it the same? Different?

Young and old alike knew that unless they worked together, there would be lack of food, clothing and shelter for the camp. Ample food was needed to provide for everyone in the winter, and care must always be taken so that the camp is protected from wandering enemies. It was a life of mutual aid and concern, and each and every person had an important part to play to maintain the community.

What special and important role does each member of your family play in the survival of your family and relatives or neighborhood?

The Indian society can be characterized as a low science and technology society. What are its advantages? Disadvantages?

Activity 1: Comparing Family Roles

1. People serve a variety of roles in a community and family. Compare some of these roles by completing the chart below. List some roles assumed by the different family members. Some possible roles are found at the bottom of the page. Add other roles if needed. Some of the roles listed can be used several times and each person may serve several roles (e.g., father may carry out several roles).

INDIAN FAMILY	MODERN FAMILY
Father	Father
Mother	Mother
Daughter	Daughter
Son	Son
Elders	Elders
Aunts and Uncles	Aunts and Uncles

Possible Choices:

apprentice, baby sitter, "boss of the house," wage earner, cleaner, cook, counselor, demonstrator, dish washer, doctor, farmer, food gatherer, friend, grounds custodian, guardian, healer, housekeeper, hunter, pet keeper, play mate, protector of the family, provider, repair person, security guard, skilled worker, story teller, student, teacher, tool maker, garbage collector, factory worker.

(DO NOT WRITE IN BOOK)

DISCUSSION QUESTIONS

- What roles are the same in both columns?
- With developments in science and technology some roles have changed. What are some changes?
- What roles do you feel are the most important and why? What is *your* role in your family?
- What roles do *you* expect to take on in the future?

Dilemma 1 — CHASING HAWK'S DILEMMA

Alvina Chasing Hawk is a 13-year-old Plains Indian girl. She has three brothers, two younger and one older. Her elderly grandparents live with her parents and the children in a small village.

Today is an exciting day of the year for the Chasing Hawk family and their community. It is the time of the year to pick up all belongings, place them on travois pulled by dogs and move west by foot. The annual trek is necessary for the tribe's survival. The main purpose is to hunt the bison or buffalo, which provides for their food, clothing and shelter. Another purpose is to go into the hills to be more comfortable during the hot summer days and to pick the fresh wild fruits and vegetables. Some are eaten during the summer and the rest will be preserved and saved for winter. Everyone takes part in the activities.

On this day, the women and children are almost finished packing. The men and boys scout the trail, keeping a lookout for trouble on the new path to be taken. A number of wandering enemy bands have been sighted during the past week. A few members of the tribe have already started on their way.

Mrs. Chasing Hawk prepares her family for the long trek and discovers the need for more water. She asks her daughter, Alvina, to go down to the river to fill three containers. Alvina is to take her two younger brothers to help her carry the containers. Mrs. Hawk reminds her daughter of the wandering enemy tribes and cautions her to return as quickly as possible.

Alvina leaves immediately, knowing it takes 15 minutes to reach the river. The river is shallow and murky at the edge so she has to carry each container into the middle of the stream to obtain clear drinking water.

Suddenly, Alvina discovers that her younger brothers have disappeared. She decides to look for them herself, hoping that they are nearby. She feels that in the half hour that it will take to go to camp and return with a search party her brothers could be exposed to many dangers.

Since they are not in sight, she searches all around, softly calling for them. Not far from camp, climbing over some washes and small rises, Alvina comes upon one of the boys' small toy bows. A number of yards later she finds an arrow belonging to the bow. Alvina knows that her brother had dropped them. In the distance she sights an outcrop of rocks and moves swiftly and quietly towards them. She is uneasy, realizing that she is away from camp and protection. She does not want to be sighted by a stranger. As she approaches the rocks, she sees some blood on the soil. Her heart pounds. She notices that the area is quite scuffed up and that many grasses and weeds have been trampled upon carelessly. She starts to run, following the trail of blood. At the bottom of the wash, under some mesquite bushes, she sees the source of blood. There lies a dead fox, killed, probably, by a bobcat.

She continues on, trailing the scuffmarks and broken weeds for quite a distance. The she hears excited yells that sound like her brothers'. She runs faster, always searching the horizon for trouble. She finally finds her two brothers, excitedly playing with two fox cubs. Although she is relieved seeing them safe, she suddenly feels strange and frightened and alone.

Alvina hugs her brothers and tells them each to carry a cub and follow her quickly and quietly back to their village. As they near the village, she suddenly comes within hearing distance of screaming, yelling and loud commotion. She urges her brothers to move faster. When they reach the large group of rocks they quickly kneel down behind a large boulder to listen. Suddenly, she sees a number of strange men on horseback coming at a fast pace from the direction of her village. She recognizes the strangers as a wandering, rival band in search of food or horses. When they ride out of sight, the three Chasing Hawk children run towards camp. As they get close, Alvina heard the unmistakable death chant being sung by the women and girls.

Relief shows in her mother's eyes when she sees the children, but a deep hurt is not hidden. Alvina looks at the camp and realizes it is not disorganized from the preparation for the move. She sees that several travois have been knocked over. Belongings are scattered about, and a dog lies in blood. She looks toward her own travois and sees the reason for the chanting. Her wise and loving grandmother is lying part way out of the travois. She realizes her grandmother is dead. She

now understands what had happened. The strangers, seeing the children, knew there would be a village nearby. They rode quickly in to surprise the people. They raided the camp, taking supplies and horses. In their haste to leave, they inadvertently knocked over several travois and people.

Alvina feels weak. She realizes that the tragedy that befell her village was due to the fact that those strange people had seen or heard her and her brothers.

Should Alvina be punished? Why or why not?

DISCUSSION QUESTIONS

- In what ways was Alvina disobedient? What rule or rules did she break?
- If you were Alvina, would you look for your missing brothers, even if this means putting the village in danger? Why or why not?
- What is more important — the safety of the village or Alvina finding her brothers?
- Should Alvina be blamed for the tragedy? Why or why not?
- Since Alvina was trying to be helpful, does that make any difference in deciding whether or not she should be punished?

Activity 2: What We Value

The simpler world of the food gathering Indian tribes is quite different when compared to our highly industrialized society today. Early Indians placed much value on basic survival needs. What do we value today?

On a *separate* paper list some values of the early American Indians. List your own values. Values can include things, objects, people, ideas or anything that people consider important.

INDIAN YOUTH	YOU
buffalo	money

Select from the Indian list the most important and put in the above Indian column. Do the same for the *second* most important, *third* most important and so on until all items are listed.

Select from your list the most important and put in the above "you" column. Do the same for the *second* most important, *third* most important and so on until all items are listed.

Compare the two lists (2 and 3) above.

a. How are the lists similar? How are they different?

b. What items do *you* value that have resulted from advancements in science and technology?

c. In the examples given in the chart above, buffalo and money are very similar in that they can both be used for trading and/or purchasing other things. Find other items which can be "paired off" and serve similar ways in both cultures.

d. Which of your values seem trivial when compared to the Indians' values for survival?

e. What values held by early American Indians do you find desirable? Would you want to be part of a society which held those values? Why or why not?

f. What does survival mean in today's world? What must we learn and do in order to survive?

(DO NOT WRITE IN BOOK. Use copy distributed by your teacher.)

Activity 3: A Household Census

In this activity you have the task of a census taker to find out how households have changed over two generations. You will be comparing your own household today with that of your parents' household when they were children.

Procedure

- Your teacher will distribute *Household Census Form 1* for you to complete.
- A second form, *Form 2*, will be distributed by your teacher. using the questions on *Form 2*, interview your parent or guardian. He or she will have to recall the time when he/she was your age and answer the questions as if he/she were being interviewed then (20 or more years ago).
- If your grandparents live with you or nearby or if you know an older person, obtain another *Form 2* from your teacher. Change the number from *Form 2* to *Form 3*. Interview that person in the same way as you did for your parents. Again, they must remember their household when they were your age.

Tabulating the Results

- When all the interviews have been completed and the forms have been filled out, sort the forms into three groups according to the form number.
  - The class will form three groups:

    Group A will work on Form 1
    Group B will work on Form 2
    Group C will work on Form 3
  - Each group will first obtain a new survey form and title it Survey Results. Also indicate the time period (Present Time, Parents' Time, or Grandparent's Time). On this form record the *total number of forms* in your set.
  - Take the first form and read out the answer to the first question. A member of the group will record that number on another piece of paper. Take the next form and record the response to the same question. Do this until you have recorded all the responses to the first question. Add up all the numbers and put this *total* number in the *question 1* space of the *Survey Results Form*.
  - Proceed in the same manner with the next questions until all the questions have been tabulated.
  - To speed up this tabulating task, you may wish to work in pairs. Each pair will be assigned questions to tabulate. When you finish recording the answer on one form, pass that form to the next pair. When they finish, they will pass it to the next person in line. If you decide to tabulate the survey questionnaire this way, you must make sure that you have tabulated each form. A good way to check this is to number each form. On a separate sheet of paper, number down the sheet with as many numbers as there are forms. When you record, you will record the response next to the number that corresponds to the number on the form. Any blanks, when you finish, will mean that that form had not been tabulated. You can then go back and find the particular form that you missed.
  - Find the *average number* for each question. This number is obtained from dividing the *total* number by the *number of forms* counted by your group.

    Question #1 = 120
    Number of forms = 30
    120 ÷ 30 = 4

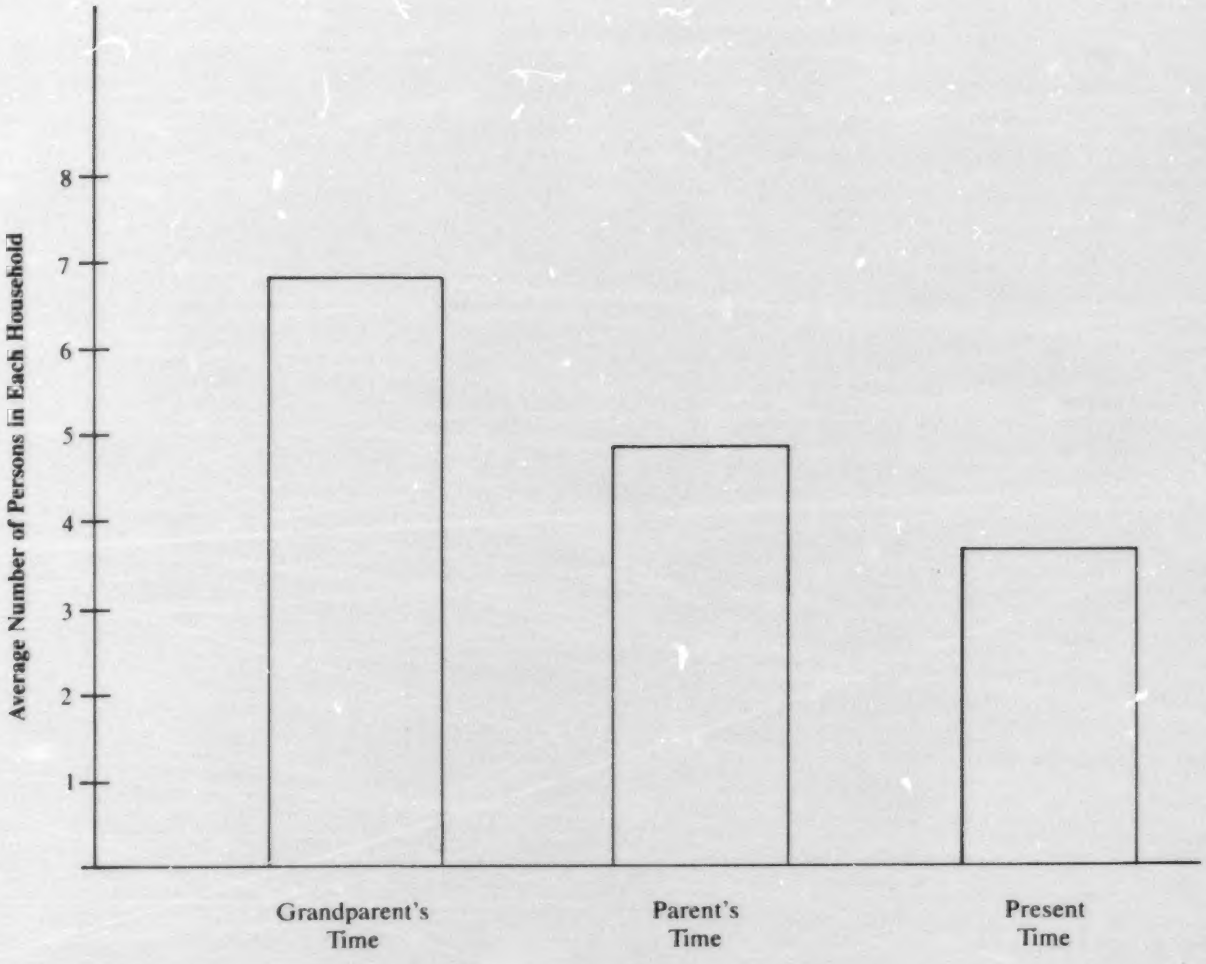
    The average number of persons in each household is 4.
    - Record the *average* number found for each question next to the total number. Circle the number (e.g., Question #1 *120* ④. If the answer is a fraction, round off the one decimal place. 3.67 is rounded to 3.7.)
- After all the answers to the question have been counted and recorded, submit the copy of the *Survey Results* to your teacher. These results will be posted for your later use.

Graphing the Results

- Your teacher will assign you to graph the results of one question. Obtain the information you need by consulting the three *Survey Results* posted in the classroom. Using the *average* numbers found for your assigned question, construct a bar graph to display the findings.

e.g., Question #1

SAMPLE GRAPH FOR QUESTION 1



Activity 3: A Household Census — Form 1

Instructions: Answer the following questions (it is not necessary to put your name on your paper)

1. How many persons live in your household? _____

2. How many children live in your household? (under age 18) _____

3. Do your grandparents live with you? Number? _____

   Yes___ No___

4. If your grandparents do not live with you, how often do you see them each year?

   mother's side _____

   father's side _____

5. How many persons in your household work outside the house? _____

   full time _____

   part time _____

6. How many persons in your household conduct all their business at home?

   (farming, have office in the house, etc.) _____

7. Approximately how far did you travel on your last vacation? _____

8. In what type of dwelling do you live?

   single family house _____

   townhouse (or) apartment house _____

   other (describe) _____

9. During your life, how many times have you moved? _____

Activity 3: A Household Census — Form 2

Instructions: Interview a parent or guardian using the questions below.* The person you interview is to put himself/herself back in time. He/she will answer the questions in the way he/she would have at the age you are now. That is, he/she is to tell you about his/her *childhood* household. (Do not put names on paper.)

1. How many persons lived in your household? _____
2. How many children lived in your household? (under age 18) _____
3. Did your grandparents live with you? Number? _____

   Yes____ No____
4. If your grandparents did not live with you, how often did you see them each year?

   mother's side _____

   father's side _____
5. How many persons in your household worked outside the house? _____

   full time _____

   part time _____
6. How many persons in your household conducted all their business at home?

   (farming, had office in the house, etc.) _____
7. Approximately how far did you travel on your vacations when you were 12 or 13 years old?? _____
8. In what type of dwelling did you live?

   single family house _____

   townhouse (or) apartment house _____

   other (describe) _____
9. From birth to your early teens, how many times have you moved? _____

*If your grandparents live with you or nearby, or if you know an older person, obtain a second form from your teacher. Complete this form in the same manner. Change the title to read Form 3.

• When all the graphs are completed, the class will meet to examine the results. You will present your graph to the class and explain what it shows. What changes have taken place? Is there an increase or decrease? Include in your explanation what you think are some reasons responsible for the changes or no changes found.

DISCUSSION QUESTIONS

- What are the major changes that seem to have taken place?
- Between which time periods have most changes taken place?
- Have households decreased or increased in size? Why do you suppose this has occurred?
- Has there been a change in the distance of vacation travel? What has caused this change?
- Are there more or fewer persons working outside of the home? Do you think the type of work people do has changed?
- What are some conclusions that you can draw from the survey results. List some of the main reasons for the changes you found.
- If this survey had been conducted by an Indian child 200 years ago, what do you think he/she would have found? Why?
- Can you predict what responses will be obtained if this survey were conducted 30 years from now?
- Some of the questions in this survey are similar to ones asked in the national census. Why do you suppose the government is interested in this type of information? How is such information useful in future planning?
- What inventions or developments in technology, do you suppose, are responsible for the changes you found?
- In countries where most people are farmers one finds larger size families. Why do you suppose this is the case?

Reading 2 — The American Family's Companion

People in the United States today live very different lives than the American Indians of years ago. Many changes in today's society have affected families and their values. An important source of this change has come from science and technology. One of the most widely used technological developments has been the television. To dramatize this point, think about these questions:

How has TV changed the lifestyles of the American people in the last 30 years? (Hint: Interview your parents, grandparents, senior citizens – What did they do in their free time?)

How many hours a week does your family watch TV?

How important is TV to you and your family?

Through the medium of TV, people can tune out their everyday world and escape into whatever mood the evening TV offers. Television, unlike reading, involves very little effort on the part of the viewer. Thus, the amount of time the average American person spends reading is far less than is spent watching TV. What values does the American public place on TV? (Think about the huge sums of money spent in research, commercials, and productions of TV shows.)

How do the commercials seen on TV affect you when you are out shopping?

To what extent do characters portrayed on TV influence the lives of people who watch them?

How often do you turn on the television to watch a specific program or just "to watch TV"?

For some families a big decision of the day may be selecting the evening TV program. Whereas, for the Plains Indian the important decision of the day may be selecting a safe place to camp for the night. Our concerns of today are quite different. Perhaps one of the reasons is because we are not directly involved in hunting for food or defending ourselves from enemies. Providing for and protecting the family from danger was the primary activity of the early American Indian. Today, wild animals do not roam freely in towns and cities. We have police to guard our safety. As a result, we have more time for leisure and can spend more time thinking about entertainment. TV, of course, is a prime provider of entertainment. And, a typical evening scene is one with the family gathered around the TV set.

Activity 4: How is TV Your Companion?

What role does TV play in your life? Is it a major source of entertainment? What do you learn from TV? Some answers to the above questions may unfold when you complete this activity.

Procedure

- Your teacher will distribute three (3) copies of the Log Sheet. For the next three days you will keep a record of all your TV watching, using a separate sheet for each day. List each program and fill out the information requested (time, type of program, etc.) Do this as *carefully* and *completely* as possible.

- When all three log sheets are completed, return them to your teacher.

- ***Analysis of Log Sheet.*** At the next class period your teacher will distribute to you log sheets completed by another student. It will be your task to summarize the other students' TV log. Your summary should address the following questions:

  - Approximately how much of the day is spent watching TV?
  - What main types of programs are watched?
  - Does the person seem to be watching whatever comes on or does he/she seem to select particular types of programs?
  - Has TV viewing become a habit? (Is the person watching TV all the time, even when doing other things?)
  - What part of the time is spent watching commercial TV? Non-commercial TV?
  - In what ways is TV important to the person?
  - What new information has the person gained from watching TV?

- Form a discussion group with three or four other students. Each member of the group will present his/her TV log summary. After all the summaries have been presented, discuss the questions below.

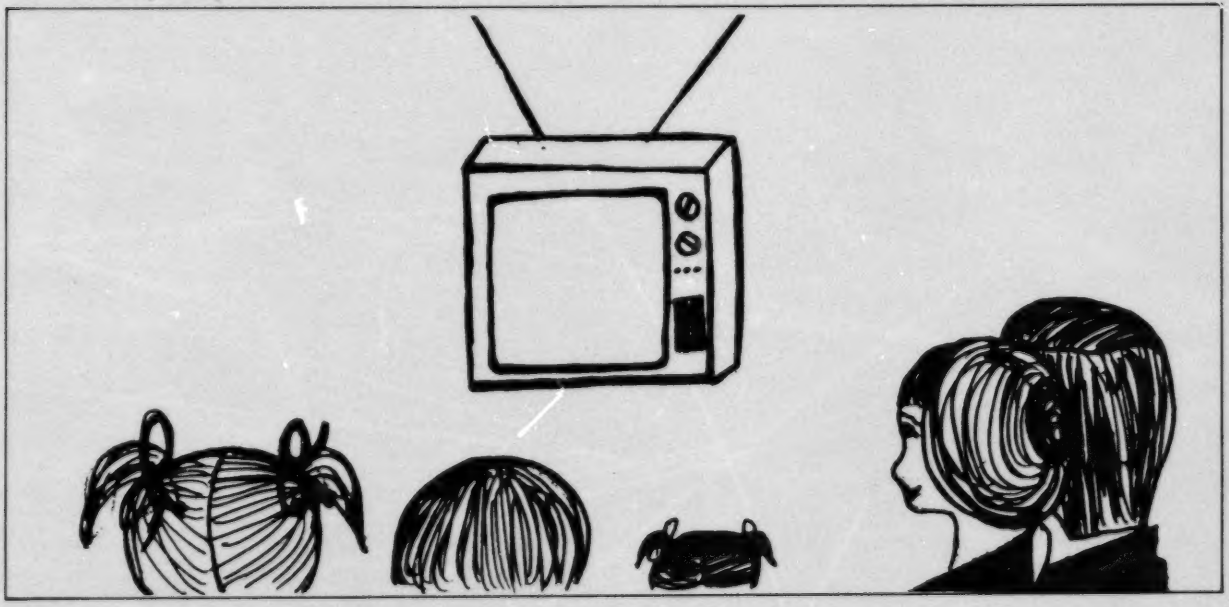
  - In what ways are the TV logs similar? Different?
  - How do you think TV has influenced the way we lived?
  - What benefits are gained from watching TV?
  - Do you think that there are any drawbacks from watching TV?
  - How would you respond to the following comment? "Our lives revolve around the TV set."

Select a recorder in the group to write down the main points of the discussion.

- A representative from each group will present a summary of the group's discussion to the entire class. After all the group reports have been heard, the class as a whole will write a concluding set of statements based on what it has learned from the TV logs and the group summary reports.

  - What can you conclude about TV watching of the class as a whole?
  - Is the pattern of TV watching about the same for everyone in the class?
  - How do you think TV has affected the way we live?

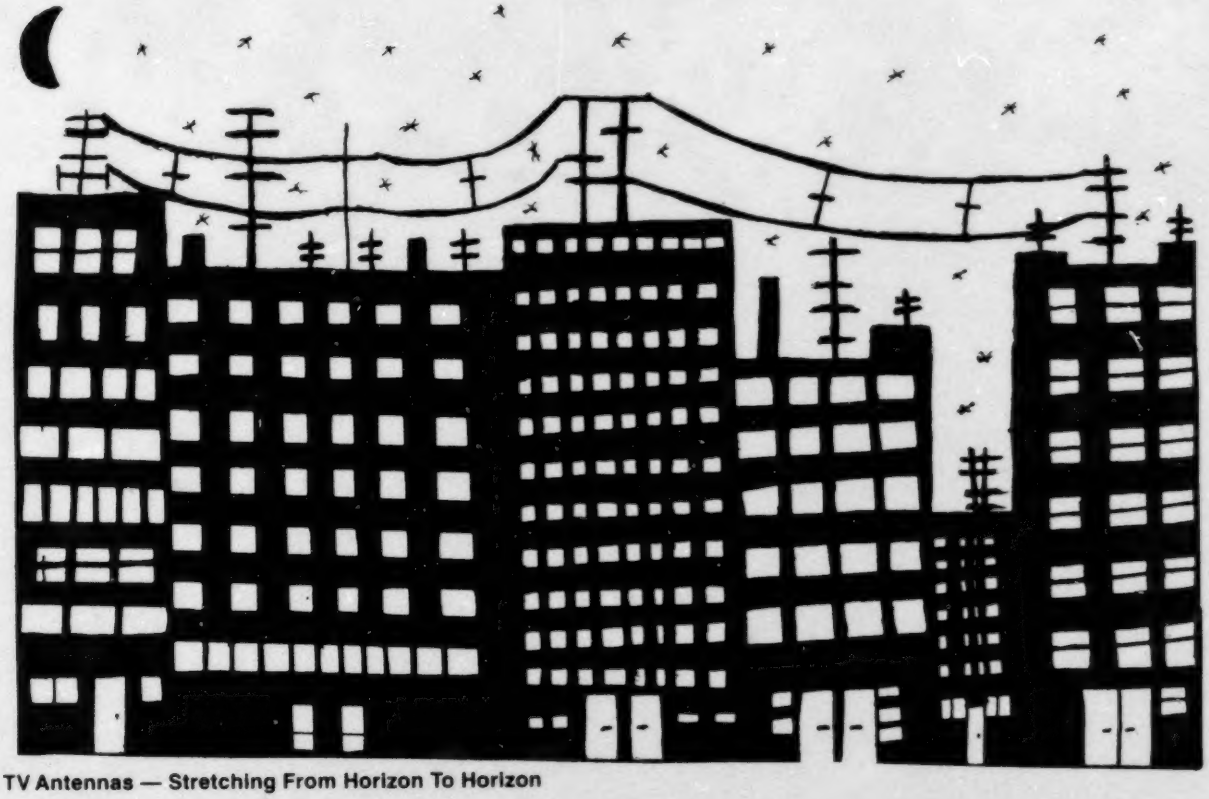
TV — A Family Companion



Activity 4: How is TV Your Companion?

LOG SHEET

Time	Title of Program	Type of Program (sports event? comedy? quiz show?)	Who else is watching with you? (friend? sister? parents?)	What else are you doing? (eating? home-work? talking?)	What are your reasons for watching this program?	What did you find out that you did not know before?



TV Antennas — Stretching From Horizon To Horizon

Activity 5: Other Opinions on TV

A number of people have been very concerned about the effects of television on youngsters. One major concern is that children are being exposed to too much violence. For example, one study concluded that the average young viewer has seen 11,000 murders by the age of 14. It is believed that seeing violent behavior can lead to aggression in children because they tend to copy what they see and hear.

Recently several organizations joined together to publish a pamphlet discussing ways to improve the TV viewing habits of youngsters. Their concern was based on a list of effects the group felt were undesirable. In addition to excessive violence on TV the pamphlet pointed out that:

- Children eat too much junk food while watching television and do not get enough exercise.
- Children who watch TV late at night do not do their homework. Also, they are sleepy at school and have a hard time paying attention to their work.
- Children who watch too much TV tend to read poorly because they spend little time reading.
- TV viewing reduces the time children spend playing with friends. This affects their ability to adjust socially at school.
- Parents use the TV as a baby sitter to keep children quiet and out of their way.
- When there are two or more television sets in the household, the family becomes divided. Families spend less time doing things together.

Do you agree or disagree with the points brought out/in the pamphlet?

Procedures

- ***Group Discussion.*** The class will form six (6) groups. Each group is assigned one of the six statements.
- Group members are to decide whether or not the statement is valid.
  - What evidence is there to support or dispute the statement? Cite some examples.
  - Do the findings from your TV logs support or refute the statement?
  - Does the statement apply to the class?
  - How might your parents respond to the statement? Explain.
- As a group come up with some suggestions on how people can improve their TV viewing habits.
- ***Class Presentation.*** A representative from each group will give a five-minute summary of the group's discussion and decision. He/she will also list the group's suggestions for improvement on the board.

• After all presentations have been made, the entire class will examine the suggestions offered by each group.

- Which suggestions does the class find easy to accept?
- Which are most difficult to accept?
- If the suggestions were accepted, what changes will take place in your daily activities?

An Additional Class Discussion Topic. Imagine that you are talking to an Indian teenager living 200 years ago. How might you convince him/her that TV is necessary and important?

DILEMMA 2 — TV ON TRIAL: WHAT IS YOUR VERDICT

A fifteen-year-old boy is on trial for robbery and murder. He admits to having entered the house of his 82-year-old neighbor, taken four hundred dollars, and then shot her with the gun found in the house.

The defendent's lawyer argues that the boy was not responsible because he was "brainwashed" by television. The lawyer presents the following reasons:

• The boy was a confirmed TV addict, spending more than six hours a day watching the screen. He refused to eat unless the TV was on. Sometimes he would even sneak out of bed to catch a late show.

• Cops and robbers shows such as *Kojak, Baretta, Starksy and Hutch,* were his favorites.

• He lived in a fantasy world of television and had little sense of right and wrong.

• The night before the murder, he watched two shows in which the crimes shown were very similar to the crime committed. The boy was, therefore, acting out a TV script.

According to the lawyer, his client is mentally disturbed because of TV viewing. "He has seen so much violence and killing that murder, in his mind, is no different from swatting a fly. TV should be held responsible for the crime, not the boy."

How should the jury decide? Should they declare the boy guilty? Or, should they declare that television is guilty? Why?

DISCUSSION QUESTIONS

- What type of evidence is needed to show that TV directly affects the way people behave?
- If TV is found guilty, does this mean that we can blame TV for our actions?
- What responsibilities should the parents have? The TV companies?
- Is the lawyer being fair in accusing TV for affecting the boy's mind?
- Have you seen people copying what they see on TV?
- If the boy admits to committing the crime, should that be reason enough for the jury to declare him guilty? Why or why not?
- How does TV influence what you do?

DILEMMA 3 — TO WATCH OR NOT TO WATCH

Mary is an eighth grade student who enjoys watching TV. Her parents do not mind this but have restricted the type of programs she can watch. Her parents do not want her to watch programs showing a great deal of violence.

The most popular teen-age show on TV is a detective program with much violence. Mary's parents have forbidden her to watch this program.

All of Mary's classmates watch the detective show weekly. They often talk about it in school. Mary is too embarrased to let them know that she doesn't watch the show for fear that they would think her odd. She bluffs her way through the conversations about the show by not talking about anything specific. Mary feels that her classmates are going to catch on pretty soon.

Mary's parents are going out for the evening. This happens to be the same night that the detective show is on. Mary feels that if she watches the show once, she will learn enough to talk about it with her classmates and not to be left out of the group. Mary feels her parents are being harsh and unfair since the other parents let their children watch this program.

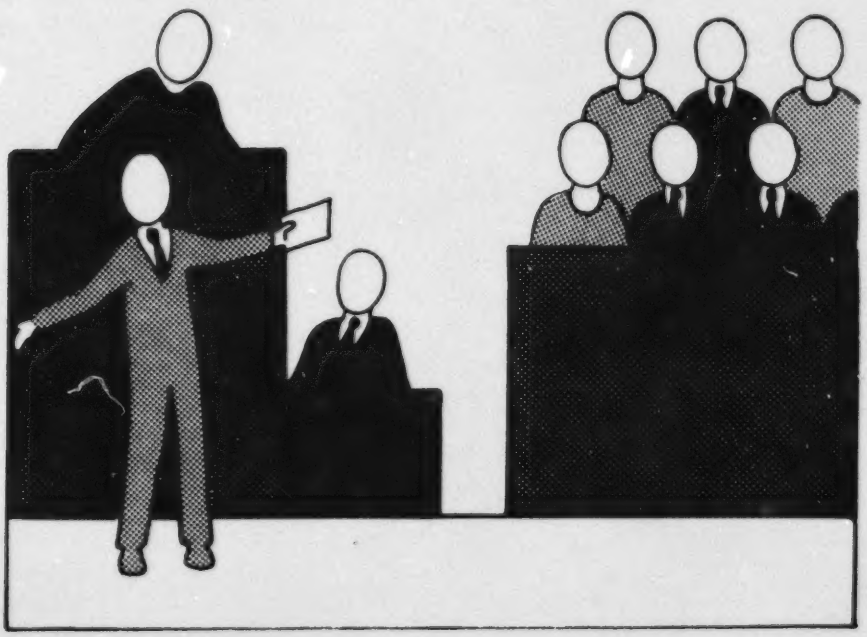
Should Mary watch the program? Why or why not?

DISCUSSION QUESTIONS

- What should be Mary's most important concern in deciding what to do?
- Is it more important to be accepted by your friends or to obey your parents' wishes?
- If Mary watches the program, she would have to lie to her parents. Should she lie? Would it matter if Mary lied and got caught? Would her parents ever be able to trust her again?
- Is it important that parent and child trust one another? Why? How important is trust between other people?
- Since Mary's parents feel that the program will be harmful to her, shouldn't they have a right to decide what their daughter can watch? Why or why not?
- Are Mary's parents being unfair? Why?
- Should a child always obey his/her parents? Why or why not?
- What responsibilities should parents have to their children? What responsibilities should a child have to his/her parents?

Activity 6: Focusing on the Future

- You have compared some of the changes brought about by our modern high science and technology society to what existed in an American Indian low science and technology society. What changes do you think will take place in the future? In what ways might the major social values of the day contribute to these changes?
- In view of how Indian and modern societies have stressed different values, what values do you feel will be important for the way we live in the future?
- Looking at some of the differences between the American Indian family and the modern family, what can you predict about the role the family will play in the future?
- How do you think TV might influence the family life in the future?
- What problems, if any, do you see in the modern family? Can you suggest some solutions to solve these problems?



TV On Trial

Section II: Education

Introduction

Websters Dictionary defines "survival" in the following ways. "Survival (sur-viv-al) n. 1. Continuance, the act of outliving another. 2. Act of outlasting. 3. Anything that comes down from earlier times."

In the time of the "buffalo", the 1700's, it is said that the Indians of the Americas adapted to nature and worked together for the purpose of survival. Survival was taught, in this low technological society, by story telling and example handed down from one generation to the next.

Modern technology has changed our way of life today. We will consider some examples showing how modern technology has affected our lives and means of survival.

Education is closely linked to the survival of societies. This section will compare some aspects of education in a low technology society (early American Indian) with education in a high technology society (modern day America). It is hoped that the benefits and drawbacks of both systems will be compared and contrasted and that you might come up with suggestions for the improvement of future education.

Reading 3 - Education From An Indian Viewpoint

The following articles reflect how the early American Indian viewed education, what education was like, who did the teaching, and what methods were used. Read the following articles to gain an understanding of what education meant to the Indians.

What is Education?

Six Nation Response[1]

On *June 17, 1744*, the commissioners from Maryland and Virginia negotiated a treaty with the Indians of the Six Nations at Lancaster, Pennsylvania. The Indians were invited to send people to William and Mary College. The next day they declined the offer as follows:

> *We know that you highly esteem the kind of learning taught in these Colleges, and that the Maintenance of our young Men, while with you, would be very expensive to you. We are convinced, that you mean to do us good by your Proposal; and we thank you heartily. But you, who are wise, must know that different Nations have different Conceptions of things and you will therefore not take it amiss, if our Ideas of this kind of Education happen not to be the same as yours. We have had some Experience of it. Several of our young People were formerly brought up at the Colleges of the Northern Provinces: they were instructed in all your Sciences; but, when they came back to us, they were bad Runners, ignorant of every means of living in the woods . . . neither fit for Hunters, Warriors, not Counselors, they were totally good for nothing.*
>
> *We are, however, none the less obliged by your kind Offer, though we decline accepting it; and, to show our grateful Sense of it, if the Gentlemen of Virginia will send us a Dozen of their Sons, we will take Care of their Education, instruct them in all we know and make Men of them.*

Questions

1. Why did the Indians refuse the invitation to attend William and Mary College?
2. What was their main reason for refusing?
3. Why did the Indians think that White man's education was inadequate?
4. Do you think that the commissioners from Maryland and Virginia accepted the Indians' invitation to send their children to learn from the Indians? Explain.

[1]T.C. McLuhan, *Touch the Earth, A Self Portrait of Indian Existence*, New York: Pocket Books, 1971, p.3. Reprinted with permission from the publisher.

The Keeper of Tradition[1]

I — THE BEGINNING
In the land of the "Wrong Root" People
Where the two Wind Rivers flow
Lives a Spirit called Tradition,
Born a long, long time ago.
As the ancient lore and legends
Of "The People" slowly grew
Both in meaning, and in purpose —
Tradition grew too.
Yet a culture could not grow,
The Spirit could not live,
But for the "Keeper" of Tradition
With the knowledge he could give.

II — WHO IS THE "KEEPER"
It is he who tells the legends,
Teaches that which he has learned,
Speaks the language of "The People,"
Tells of glories they have earned.
It is he that you hear calling
In a voice that's strong and clear:
"Young men, come, raise the lodge poles —
For the Dancers now are near."
It is she who bears the children, fries the bread and weaves the beads;
Sings the songs as in the old way, tends to all her family needs.

III — THE CHALLENGE
Now, listen to me for I say this to you:
The "Keeper" is human, and his time must come too.
And his knowledge is so precious; it cannot be bought.
Do not close up your minds; refuse not to be taught.
Do not waste any time; rather, learn while you may
The language, the sacred Tradition, as in the old way.
For you who are young will become the Elders too
And the duties of the "Keeper" will soon pass on to you
And the role of the Teacher will then become your task,
To answer all the questions that the young ones will ask.
So, know your language and your past,
and you'll earn the right to say:

"I am a 'Keeper' of Tradition —
I am truly 'Nan-ah-eh'."

The above poem was composed for Mr. Gabriel Warren, a "Keeper" of Tradition among the Northern Arapaho, by his Grandson. The poem was read by Mr. Warren at the funeral services, as a tribal tribute to Francis Setting Eagle.

Perhaps the expressions regarding both "Tradition" and "The Keeper" will help us to a better appreciation of "The Indian Way."

The precise meaning of the designation "Wrong Root People" as applied to the Arapaho (also called "The Blue Sky People" by the Cheyenne), has now been lost.

Questions

1. Why is the "Keeper" so important?
2. What might happen if there were no "Keepers"?
3. Who can be a "Keeper"?
4. How does one become a "Keeper"?

[1]Warren, Gabriel, The Keeper of Tradition. *The Wind River Rendezvous*. May/June 1977 Reprinted with permission from the publisher.

THE OLD ONES[1]

And now let us think of the Old Ones. It is they who are our true teachers. Those who have kept the wisdom accumulated over centuries will help in these troubled times. They speak our true Language, and it is our instruction that when they speak, we should listen.

Questions

1. Why do you think the "old ones" are regarded as the true teachers?
2. What do you think the author means by the term "true language"?
3. In what ways can the young benefit by listening to the "old ones"?
4. How well do you listen to older people? Why?

[1]Akwesasne Calendar, 1974. Reprinted with permission from *AKWESASNE NOTES*, Mohawk Nation, Rooseveltown, New York

OUR WARRIORS[1]

They Say You Are Our "Warriors". It Is True That You Defend Our Nations, Our Homes. Our Lives Depend On Your Alertness And Your Collective Strength. And More-It Is You Who See That Our Children Are Fed And Kept Warm; You Who Speak In Our Councils, Who Find Vision To Guide Our Ways, Who Have Duties To Perform As Male Human Beings.

Men! Always Remember Our People And Help Us Keep Our Nations Together And Strong.

Questions

1. How do the "warriors" serve as teachers?
2. Do you think that the "warriors" are always preparing for combat? Why or why not?
3. Are all males regarded as "warriors"?
4. What are the special duties of a "warrior"?

[1]Akwesasne Calendar, 1974. Reprinted by permission from *AKWESASNE NOTES*, Mohawk Nation, Rooseveltown, New York

OUR SPIRITUAL LEADERS[1]

Let Us Turn Our Thoughts To
Those We Look To As Spiritual
Leaders. It Is They Who Sought To
Gain Vision For Our People, Who
Always Remind Us Of The Creation,
Who Guide Us In The Ways To Go
About On This Earth. They Live
In Harmony With All Things And
Provide Us With An Example Of
How Human Beings Are To Do.

Spiritual Leaders! Continue To
Link Us More Closely With Our
People, Our Land, And Our Life.

Questions

1. In what ways might a "spiritual leader" be *different* from "the old ones"? Similar?
2. What are the teachings of a "spiritual leader"?
3. In what ways does a "spiritual leader" teach?

[1]Akwesasne Calendar, 1974. Reprinted by permission from *AKWESASNE NOTES*, Mohawk Nation, Rooseveltown, New York.

CHIEFS[1]

We turn our minds to those we have asked to lead us. We acknowledge the heavy burdens we have given you, knowing that now you eat last, waiting for your people to be fed. Your tongue can speak only with our voice; your responsibilities are heavy. You have little wealth left, for you have shared all with us.

Leaders! We demand even more-keep your vision pure and clear, have wisdom & compassion in your thoughts. You are the servant of the people, and our love & respect will be your reward.

Questions

1. How does a "chief" serve as a teacher?
2. What does the line, "Your tongue can speak only with our voice" mean?
3. What special qualities should a "chief" possess? Should the young need to learn these qualities?

[1]Akwesasne Calendar, 1974. Reprinted by permission from *AKWESASNE NOTES*, Mohawk Nation, Rooseveltown, New York

OUR CLAN MOTHERS[1]

We Turn Our Attention Now To The Senior Women, The Clan Mothers. Each Nation Assigns Them Certain Duties. For The People Of The Longhouse, The Clan Mothers And Their Sisters Select The Chiefs, And Remove Them From Office When They Fail The People. The Clan Mothers Are The Custodians Of The Land, And Always Think Of The Unborn Generations. They Represent Life, And The Earth.

Clan Mothers! You Gave Us Life — Continue Now To Place Our Feet On The Right Path.

Questions

1. Who are the "clan mothers"?
2. What special duties do "clan mothers" have?
3. Why are "clan mothers" important?

[1]Akwesasne Calendar, 1974. Reprinted by permission from *AKWESASNE NOTES*, Mohawk Nation, Rooseveltown, New York

OUR WOMEN[1]

It Is The Women People Who Gave Us Our Life, Who Are Related To The Mother Earth. We Turn Our Thoughts To You Who Raise Our Young Children In Our Ways And Languages, Who Keep Our Nations On The Path Of Life, Who Hold Purity In Your Ways And Hearts.

Women! Remain Strong In Our Ways So That Our Nations Will Endure.

Questions

1. Who is Mother Earth? In what ways are women related to Mother Earth?
2. What things do the women teach?

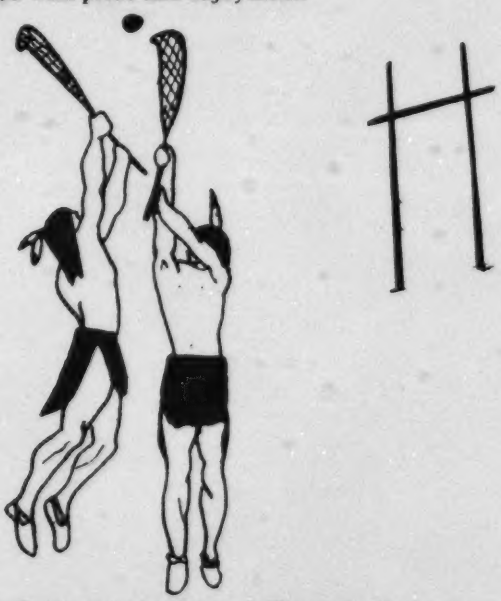
[1]Akwesasne Calendar, 1974. Reprinted by permission from *AKWESASNE NOTES*, Mohawk Nation, Rooseveltown, New York

Reading 4 — Early American Indian Education

The education of American Indian children reflected the need to be adept in survial skills and to contribute to the welfare of the people. Everything that the Indian child was taught was something that he/she would need in adult life. What was learned included knowledge of games, ceremonies, arts and crafts, food gathering, fishing, trading, horsemanship, transportation, religion, sewing, farming, hunting and building of shelters. Many skills were learned through playing games which were fun, but each had a purpose. All learning was preparing for responsible adulthood.

An important Indian concept understood by Indian children was that all things were learned from the adults. The adult, therefore, was the model for the young to follow. Children were taught to obey the tribal laws and customs. One learned to be even tempered and to avoid anger. One never blamed a demon or other forces for misfortune. Rather, one learned to live in harmony with nature and the universe. American Indian children also learned that the only thing one inherited from birth was the family and tribe to which one belonged. Everything else in life — material things, food or weather — were gifts of the Great Spirit, and all things belonged to Him. One's fortune and misfortune were determined by one's skills and abilities.

In learning how to survive, Indian children had to understand their total environment. This included understanding about how weather, seasons and other changes affected their surroundings. Everything one learned centered around day to day living. All teaching and learning occurred where and when it was necessary. This could be on the hunting grounds or around the cooking fire. There were no school houses or classrooms as we know them. To the American Indian the plains, the mountains, the waters, or lodge were all places of learning. Moreover, each and every task was learned with pride and enjoyment.



Indian Children Learn Through Game Playing

Indian Girls Learn About Camp Life

Girls learned about all the activities that were necessary for running the camp. They had to understand how the elements affected plants and the growing seasons of the many different fruits, vegetables and seed-bearing plants. In order to cook or preserve foods for the winter, the girls and women had to know about all the special properties of each and every food in order to prepare them properly. They had to make the utensils needed in food preparation. They had to learn to make the family house whether it be sod hut, wickiup, or teepee. They had to be skilled in sewing, making a travois, or cradle board. Everything the family used, they had to make.

Boys had to know all that was possible about each game animal and understand its habits and migration routes. They had to be able to make the weapons and tools needed for the hunt or warfare. They became apprentices in the hunt and warfare and in leadership roles by practicing and gradually perfecting the skills needed. Again, there was no specific place to learn these things; it depended on where a particular activity was taking place. All of the Indian boy's time was spent in learning the art of survival and protection.

The teachers of Indian children were all the people of the village. Spiritual leaders (Holy Men), warriors, chiefs, clan mothers, the Old Ones, women, men, parents, second parents and other memnbers of the tribe — each taught in their area of specialty. Adults were always ready to listen to a child and to teach him/her. The Holy Man taught by telling of heroic tales, reading visions or dreams, and giving advice. The second parents (close friends or other family members) trained the child for the physical tasks needed in adult life. The Old Ones taught by sharing their experience and wisdom. All taught through example and aid. And, children also learned very quickly from each other, sometimes even through ridicule.

Punishment often came in the form of suffering the consequences of a lesson poorly learned. If one cried or warned an enemy, the lives of the villagers might be endangered. If one failed to learn how to hunt and raid skillfully, one might be severly wounded or killed. If one's arrows were poorly made and did not shoot straight, one might miss his target. If the girls did not gather enough food with the women, it might mean starvation by spring. Indian children were not punished physically by adults. Instead, they learned proper behavior through chiding by peers or adults when they acted improperly. Indeed, many tots have touched hot cinders, a hard lesson to learn. However, the Indian community would not expose anyone to extreme danger. Indian adults believed in taking time to explain things to their own children or any other child with a question or problem.

Very little in the way of mathematics was taught to an Indian child. The American Indian usually needed only to count from one to ten, using fingers, beads, sticks or even pebbles if necessary. One measured by using the length of one's hand, forearm or arm. The calendar was numbered by drawings on an animal skin, marks on bark, sticks, stones, rocks, trees, or even pictures (pictographs, petroglyphs) on cliffs and totem poles.

Besides the spoken word, the Indian child learned to use smoke signals for communicating over long distances. They could talk with their arms and hands (sign language), and make blanket signals and trail markings. Trail markings or directions were signs made by special placement of bent twigs, chip marks or burns on trees, stone piles, buffalo bones or pictures on rocks. Objects were often sent to another person or clan or tribe which told a story in itself; for example, snakeskin with seeds told of food, a snakeskin with arrows warned of danger. Or, an object such as a beaded belt might contain a longer message.

The Indian child learned history from the adults who told stories of the tribe's history, beliefs, and legends. Information on the tribe's origin, history and how the tribe settled were passed from one generation to the next in story form. Priests were in charge of keeping the legends alive. These legends told of the creation, spirits, life, death, gods, animals and even the meaning of prominant rock formations in the history of the people. A story was a history lesson.

Story telling, a main form of teaching, took place in the evening around a fire, in a dwelling or a ceremonial chamber. Stories were told whenever there were a few ears to listen, learn, remember and pass on another day. However, the best time for much story telling and learning was during the severe winter season. At this time little could be done outside the lodge, away from its warm fire.

Most story tellers were the old men, brave warriors, chiefs, medicine men and grandmothers. They were the elders of the tribe who possessed much experience and wisdom. The people looked up to them because they had learned to live in harmony and balance with the Creator and Mother Earth. Each story teller was also an expert in what he/she did, whether it be hunting or sewing. Some belonged to special fraternal or maternal societies and shared the stories from their group.

The stories were about brave deeds, the gods of the sun, moon and stars and the ways of nature. While the stories were sometimes more amusing than serious, they all had an important moral lesson to impress upon the student. The stories might have originated long ago, but they were told over and over again. In that way, they would be remembered and not become lost. The stories had to be well memorized for all the knowledge of the tribe was contained in them.

DISCUSSION QUESTIONS

- What do you believe survival meant to the Indians of the 1700's? What does it mean in our society?
- Do you feel your survival depends upon your skills and actions? If so, which skills are important? Why?
- Compare the things the American Indian learned to those things that you are taught today. How are they similar? Different?
- How did the teachers of the traditional Indians differ from our teachers of today? How are they similar?
- Are the consequences of a lesson poorly learned today as serious as that for the early American Indian? Why?
- Compare and describe the subject areas taught to Indians of the 1700's to the subjects you are taught today. How are they similar? How are they different?
- What were the "tools" or methods used for teaching Indian children? What tools and methods are used in your education?
- Do you believe the lessons taught to the Indian children of the 1700's would be sufficient education for your survival today? Explain.
- Did Indian education serve its purpose? Does our education serve its purpose? Explain your answer.
- What material things were used in Indian education? What materials are used to teach you?

Drawing Your Own Conclusions

Think about the articles you have just read about traditional Indian education. Write a brief description about Indian education. Include your own personal reactions to their system as you see it. Also include what you think are the advantages of education in a low technological society.

Activity 7: Lifestyle — Past and Present

Imagine that you have to spend a day entertaining a guest, an American Indian teenager from the 1700's. No doubt you will find his/her habits very different, and he/she will, in turn, find your ways very strange. To more closely examine and compare each others' style of living, complete the following chart:

- The left column lists a series of daily events.
- In the second column fill in what you think might be some activities performed at those times by an early American Indian teenager of your age and sex. (Try to remember what you have learned in the previous readings.)
- In the last column fill in your daily activities, using a typical school day as an example.

NOTE: As an example, the first event of the day has been filled in.

DISCUSSION OF "DIFFERENCES" LIST:

- After you have completed your list of differences and reasons for the differences, meet in small groups of 3 to 5 students.
- Compare your list with those of your other group members. As a group, select four differences which you think are most extreme.
- If you were entertaining this guest would you find these more extreme differences creating conflict? If a disagreement comes up, how might you solve it?
- What does the Indian teenager learn during different times of the day? What do you learn during different times of the day?
- Each group will present a short summary of their discussion when the entire class meets to hear the group reports.

Activity 7: Life Style — Past And Present

(Chart A)

Activity	Early American Indian	You
Rising in the morning	Get up at sunrise, dress according to weather. Pray on hill (or sweat lodge). Eat meal of bread & berry juice.	Wake up when alarm clock rings, shower & dress, Eat cereal, eggs juice & milk.
Preparation for the day		
Morning Activities		
Midday Meal		
Afternoon Activities		
Late Afternoon Activities		
Evening Meal		
Evening Activities		
Bedtime		

(DO NOT WRITE IN BOOK. Use copy distributed by your teacher.)

Activity 6: Life Style — Past And Present

(Chart B)

Review the lifestyle you just completed. Do you feel your Indian guest from the past would find differences between his life and yours? List possible differences below. For each of these differences give a reason(s) for this.

Differences	What is the Reason for this Difference?

(DO NOT WRITE IN BOOK. Use copy distributed by your teacher.)

Introduction to Dilemma 4: Dawn's Dilemma

Today, many Indian leaders feel that one of the most important aspect of Indian education is to preserve their cultural heritage. As in the past, Indians through word of mouth pass on their customs, language, ancient ceremonies and tribal history to future generations. If this tradition is broken, the Indian culture will come to an end.

Thus, Indians are very much opposed to the outside influence of the white man's society on the young Indian children. They feel that in order to preserve and maintain the culture they must protect their children from the white man's ways and keep them in their tribal communities.

Many American Indian children still learn in the same way the skills necessary for survival that go back many centuries. In these "schools," which are called Indian Survival Schools, children learn according to the philosophy and the ways of their ancestors. Indian children are taught how to make arrows and bows from an expert in the tribe. One learns how to drum, sing, hunt, and make clothing from people who are skilled in each of these crafts. This is how their great, great grandparents were taught, and this is the way modern American Indians attending Survival Schools are taught.

At a modern day Indian Survival School, you would not find a curriculum guide and time schedule to help "teachers" plan what should be taught or when it should be taught. Lessons are still given as the need arises – not according to a set, preplanned schedule. In fact, in these schools, the classroom might be the woods, the plain, a meeting around a council fire, a ceremony, a skin boat, a teepee or hogan, or any other convenient setting.

It is, however, difficult for the Indian today to escape the influences of the modern, outside world. While they may try not to use computers, television, film and even books, they do come in contact with these items. Also, the plains are no longer free and open, and the buffalo is no more. Their source of food and shelter has changed so that what an Indian today must know in order to live has also undergone change.

Of course, sometimes Indian children raised in traditional or the "old ways" find the influences of the modern world too much to ignore. When this happens to someone a culture conflict occurs. Dawn's brother, a young Indian boy, is experiencing such a problem.

Dilemma 4 — DAWN'S DILEMMA

Seventeen-year-old Gil White Horse has lived all his life on a Sioux reservation. His great dream is to attend college outside the reservation. However, his parents believe that his place is with his people. They want him to teach the younger children Indian culture, traditions and crafts. He has many skills, is well-liked and will be a great help to the people on the reservation.

Gil has made plans to leave secretly, because he does not want anyone to stop him. However, he has told his sister, Dawn, so that she will not worry about him. When he is settled at college, he will tell his parents. He hopes that they will not be too hurt or disappointed.

Should Dawn tell her parents of Gil's plans? Why or Why not?

DISCUSSION QUESTIONS

- In making her decision what should be Dawn's major concern, her brother's desires or her parents' wishes? Why?
- Is it wrong for Gil to leave secretly? Why or why not?
- Gil trusted Dawn when he told her of his plans. Shouldn't Dawn keep this trust? Why or why not?
- What is the meaning of trust between brother and sister? Between parent and child?
- Since parents are responsible for the welfare of their children until they reach adulthood, should they not have a say in what their children do?
- Why is it important for Gil to stay on the reservation?
- How might Gil change after attending college?

Activity 8: Scenarios on Education

Writing a Scenario

A scenario is a short story or a description of a possible event or action. It is a useful exercise to explore a new or different idea. Scenarios are commonly used by planners and managers to help them make decisions. In writing a scenario, one takes an idea and follows where that idea might lead. It is like asking the question, "What would happen if I did this?" One tries to think of the many effects of a certain decision and the kinds of changes that might take place. One type of change may cause other changes. When one starts thinking about the changes that might occur, a new scene unfolds — a scenario story.

However, a scenario is more than just a list of changes or effects, because it tries to tie in the different kinds of changes and weave together a complete story. Many people use scenarios to help them plan for the future. Using a scenario one can begin to picture new or different ideas more completely because many effects are being examined at one time.

For example, if one wanted to establish a space community one would want to think about all that is required and plan to meet those needs. The scenario's description might include the number and types of people living there, the work to be done, the kinds of food and housing, what people would do for recreation, exercise and so on. One might decide that all the work would be done by robots. What then would the humans do? Would all the free time be used for such activities as playing baseball, watching television, painting, composing music, hobbies? Will the people have enough to do to keep them busy? Would they become bored and lazy? What are the advantages of using robots? Disadvantages?

Here are some helpful questions to help guide you in writing your scenario:

- What are the main ideas of the situation?
- How well does the story hold together? Does one idea relate to another to build a complete story?
- Do you have any suggestions about how the different problems might be solved?
- Are your arguments well presented? How might you make your ideas more believable? Are they interesting to the reader?

In the reading "Early American Indian Education" you found that in the past — especially for the American Indian — education was quite different than it is today. As with many things, it is hard to imagine all the ways people can be taught or all the ways that "schooling" can occur. Also, our lives, our needs, and even our entire society changes as a result of eduction. Of course, education also changes as a result of social changes.

The following is a list of scenario themes. Select one to develop into a two- or three-page scenario. Some themes deal with the past; others, the future. Put yourself back in time and try to imagine what it was like then. Or, thrust yourself into the future and try to imagine what could be. Your scenario should be a complete story. You can invent characters and describe how they might act in that situation.

Scenario Themes

1. In the past, formal education as we now know it did not exist. In fact, this is still true in many places today. For example, in some countries children are taught by wise old people. It was felt that these old people had, after living for many years, acquired much useful knowledge and valuable experiences. This knowledge and experience could be "passed on" to the young people.

Imagine that all the children living within a one-mile area of your house make up a "school district." Imagine also that within this area an elderly, retired senior citizen has been appointed to be the teacher for the district. This person will teach *all* the children. In writing your scenario, consider such things as: 1) What would be taught? What might be emphasized? 2) How effective or useful would this type of education be? 3) What might be some of the good or strong points of such an education? Weak points? 4) How might your education compare with another student your age living in a similar "school district" ten miles away? 5) How old might you be before you feel that you have learned everything from this person?

Serving An Apprenticeship

2. In Colonial times in America many young boys were educated in what could be called an apprentice program. For example, if a child wanted to be a tailor, a shoemaker, a gunsmith, or a baker, he would, at a very young age, begin working for an expert tailor or gunsmith to "learn the trade." To start, the child might just do clean up work around the shop. As time moved on, the "apprentice" would do more and more skilled work. After many years (10 to 15 years) of this kind of training, one would become a skilled craftsman. This person could begin to train other apprentices. Some skilled jobs to some degree still use an apprentice type of program to train new people (e.g., barbers, carpenters, electricians, etc.).

Girls, for the most part, were trained in the home. Young girls learned all they "needed to know" from their mothers. What types of things did the girls learn?

Write a scenario describing what *your* education might be like *today* if you were educated as children during Colonial days. If you are a boy, write this scenario from the viewpoint of an education for boys. If you are a girl, write the scenario from the viewpoint of a girl. In writing your scenario consider each of the following: 1) What would be taught? What might be emphasized? 2) Will you learn all that you need to know? 3) What might be some of the good or strong points of such an education? Weak points? Would this type of education allow you many career or professional choices, particularly for girls?

Indian Child and Teacher

3. Imagine it is the year 2500 (about 500 years from now). You are living in a space colony orbiting the planet Mars. About 2000 people inhabit this colony.

You probably have seen many science fiction and space exploration films on television or in movie theatres. For example, *Star Wars* and *Close Encounters of a Third Kind* were huge box office hits. An award-winning and extremely popular television show, *Star Trek,* has been on television regularly for many years. These films as well as others, together with books and magazines, provide many ideas as to what life might be like in the year 2500. You are obviously familiar with some of these. (If not, find a science fiction book about life in space or in the future.)

Let your mind wander — no idea is too far-fetched. Put yourself into the future and imagine your education in a space colony in the year 2500. Describe what your education might be like. In writing your scenario consider each of the following: 1) What would be taught? What might be emphasized? 2) How might education be different? 3) What might be some of the good or strong points of such an education? Weak points? 4) What new skill might you need? 5) What new inventions might help you learn faster?

4. In some countries many years ago, it was felt that the learned person was one who had studied the works of the great writers, thinkers and historians. This was the only knowledge that was important. For example, if you were educated by this approach, you might spend several years reading, perhaps, the great works written by the early Greek and Roman philosophers. You might spend a good deal of time reading all the works of Shakespeare. You might be required to learn Greek and Latin so that you can read the great works in their original language. (Today we still require people to read one or two foreign languages in order to receive higher degrees in most subject areas.)

Imagine that you are educated today by "the great classics" approach. Describe in scenario form what your education is and how you feel about it. Pay particular attention to the following questions: 1) Who will be your teachers? 2) How effective or useful would this type of education be? 3) What might be some of the good or strong points of this type of education? Weak points? 4) Describe a job that interests you and show how you will use what you learn from you "classics" education.

5. You have read and learned quite a bit about how young young American Indian people were educated during the 1700's and 1800's. You have participated in several activities designed to help you understand early American Indian education. Use all you have learned to develop a scenario describing education today using the approach used by the American Indian in the 1700's and 1800's. 1) What type of thing will you learn? What might be emphasized? 2) How effective or useful would this type of education be? 3) What might be some of the good or strong points of such an education? Weak points?

6. At one time, only the rich could afford to have their children educated. This was very expensive because one had to hire a tutor who might live in the home of his/her student. The tutor would be paid and also have all meals provided for. On the other hand, those who were poor or had a moderate income could not afford either the money or the time for education. Children had to help on the farm or work to help support the family. Assume that you are one of the more fortunate people who could afford the services of a private tutor. Write a scenario describing this type of education. In writing your scenario, pay particular attention to the following kinds of issues: 1) What type of subjects might be included? What might be emphasized? 2) How effective or useful would this type of education be? 3) What might be some of the good or strong points of such an education? Weak points?

Introduction to Dilemma 5: Dropping Out

In the United States we have mandatory school attendance laws which require children to attend school from ages 6 to 16. The law was established for many reasons. They were written to protect the health and welfare of children. One reason was to stop the use of children in factories. These laws and child labor laws gave children a chance to become educated and not be forced into an unwanted job for the rest of their lives. In the early history of our country many young children, as young as 8 or 9, worked in hard factory jobs with little hope of ever bettering themselves. These laws have had many good effects on our society.

There are many critics, however, who argue that mandatory attendance in school is not good. They say many students who do not want to be in school make it difficult for the students who do want to be there. They feel the educational system would improve if the students who had no desire to learn could leave. They also feel the educational system does not provide the type of courses needed for all – not all schools have vocational training programs.

There are many differing opinions on this law; nevertheless, it is still a law. The following dilemma, Louis' Dilemma, deals with this compulsory education law.

Dilemma 5 — DROPPING OUT

Louis is a fourteen-year-old student and is doing very poorly in his academic subjects. His school does not offer a vocational training program. He has little interest in any of his school classes. He has a part-time job working as a mechanic in a local gas station. He has become well-known as an excellent mechanic. In fact, his employer wants him to be his apprentice. However, he must work on a full-time basis. Louis wants to be a full-time mechanic and pleads with his parents to let him leave school. His parents realize this is illegal, but they also feel that this might be best for their son. The school does not offer the type of courses he wants. Should Louis' parents allow him to drop out of school? Why or why not?

DISCUSSION QUESTIONS

- Louis' parents would be breaking the law if they kept him out of school. Should they break the law and go along with their son's wishes? Why?
- Why should people be required to go to school until the age of 16?
- Should the government have the right to make education compulsory? What might happen if there were no compulsory education laws and no public schools?
- What should a "good" education mean for a person in today's world? Why?
- If Louis can earn a good living as an auto mechanic, shouldn't that be his most important concern? Why or why not?
- Should Louis have the right to decide what he thinks is best for him? Why or why not?
- What can Louis learn in school that he might not learn being an apprentice. How might his future life be affected if he did not know these things?
- Should parents have the right to decide on the type of education best suited for their children even if it means not attending school? Why or why not?
- Should there be other ways to obtain an education? Why or why not?
- In what ways can schools be changed to meet Louis' needs? Should they change? Why or why not?

Activity 9: Designing a Perfect School

If you were to design a "perfect school" what would it be like?

The following exercise will give you an opportunity to incorporate your readings and discussions about Indian and American education. Include what you like and dislike about school. What changes would you like to see?

Form several groups of 3 to 5 people. In your small group discuss the following questions. Elect a person to record the group's opinions on each of the questions.

- How will you educate your students when they have so many different interests?
- What skills are important for living in today's highly technological society? Would a person educated in the 1700's be able to survive adequately today? How would such a person have to be re-trained (What new things would one have to know?)
- Who decides what should be taught? What do you think ought to be taught? Why?
- What should the school building be like?
- What should schools try to do for people?
- How can you find out if your new school is successful or not?
- What rules should be set up for the school? Who should make these rules? How should they be enforced?
- How do you pay for the schools? (Parents? Taxpayers? Students? Private companies? Other?)
- Society is constantly changing. How can you make sure that your school will keep up with changes?
- What kind of schedule should be used in this "ideal" school?
- What new inventions would affect your school?
- Would all learning take place in the "regular" classroom? Where else might students learn?

- Each group will present its views to the entire class.
- Class members will select the best ideas presented.
- Put them together to form a single class description of the "perfect school."
- Describe some of the different elements of this "perfect school" in a brief summary. Include any drawing or illustrations which might help to depict your ideas.

SECTION III:

Land And Technology

Reading 5

Introduction

Our planet Earth came into existence over four to five billion years ago. Since then, it has witnessed many natural changes on its surface. It has been further changed as our technology has progressed and developed.

With each phase of human history, people have utilized more and more of Earth's resources. Think of the life of the American Indian when Columbus arrived compared to our existence today. The changes created by our tools has in some cases permanently changed the surface of the earth. In fact, within a few days one can change the land which took millions — even billions — of years to form by building dams, detouring rivers and mining. Using huge modern machines, we even have been able to move mountains.

We will examine several methods used to remove resources from the earth for energy and raw materials. We will also consider the construction of dams. These methods used to obtain energy and raw materials have changed the surface of the earth. It may or may not be possible to reverse the change. If the change cannot be reversed, can we be sure that the changes we create will be beneficial?

Lifestyles have changed because of high technology and science. Much of what we have today was unknown to Indians hundreds of years ago. It is said that the Indian lived as one with nature; many, today, feel that we have mastered nature.

- Make a list of the ways you benefit from technology in your daily life.
- Which ones do you feel are needed for survival?
- Which ones do you feel are a fringe benefit or a luxury not really needed?
- Are there alternative ways for obtaining the same benefits by using less technology?
- Compare your list with that of another classmate. What are the differences? Similarities?
- Write a paragraph describing a day in your life if you had to give up one modern convenience.

Technology and Land Changes

Strip Mining

In many parts of our country, extracting natural resources are major activities. Many involve removing non-renewable resources. For example, strip mining for coal now takes place in the West as well as in the East. More and more coal is mined this way to save time and money. Machines cut deep, long trenches in the earth to reach coal. This avoids the need to bore long, deep underground tunnels to reach the coal. Currently about 44% of all U.S. coal comes from strip mining.

In addition, mining projects include the construction of mills, conveyor towers and exhaust stacks. Sometimes streams and rivers must be diverted in order to extract coal. As much as a million gallons of water may be required per day for shipping the coal to the power plants.

Machines, large electric shovels and draglines are used to mine the surface of the earth. Some of these

machines are capable of digging 400,000 pounds of earth in one bite. Some can unload their deposits 325 feet away from where they are dug. These deposits reach as high as 120 feet from the ground. Where there once was level ground, there now appears a new hill. And not far away, where the ground was level, there is now a giant, open, bare pit. Thus, modern coal mining practices drastically alter the contour of the earth.

Strip mining provides large quantities of high energy coal to other parts of the country at the cost of local water pollution and land destruction. A Kentuckian, Harry Caudill, describes a strip-mined site: "All that is left of what was once a tree-covered, living ridge is a vast mesa where nothing moves except the clouds of dust on dry, windy days, or the slicing autumn rains that carve new creekbeds across its dead surface. . . Enormous gullies are cut into the slopes and sheets of soil are carried away from more nearly level surface. Streams that had run clear for thousands of years are now mud. . . too thin to plow and too thick to drink."*

Water draining from the mined areas pollute streams with a mixture of acid and minerals, potent enough to kill fish, poison wells, and even corrode concrete.

In the past, numerous strip mining operators have failed to restore mined lands to a satisfactory condition. Some 470,000 acres of land, or two-thirds the land strip mined in the U.S., have never been reclaimed. These lands are called "orphaned lands." Plants do not grow because the fertile topsoil has been overturned and covered with rocks, boulders, and loose coal. As a result of mining, large areas of ugly wastelands are created.

Reclamation of strip mined land has met with mixed results. The most popular reclamation method is simply to level the top of the mined area or pit, but this does not restore it to its original contour. In flat areas, some efforts have been successful, but they seldom work in mountainous areas. One of the largest producers of coal is the Navajo strip mine for the Four Corners Energy Plant. Some 22,000 tons of coal are stripped daily from the land. Unfortunately, reclamation efforts in this area so far have been failures.

Pipelines

An important method of shipping, which we do not usually think about, is pipelines. Networks of pipelines crisscross the country, transporting natural gas, petroleum and coal. One might think of pipelines as our major energy arteries.

Natural gas has become an important fuel for cooking and heating in many parts of the country. The reason is because it can be cheaply and easily carried by pipelines. Once wasted at the oil fields (natural gas is found with oil deposits), gas is now widely used as a result of the system for bringing it from the gas fields to distant cities.

Even with the advent of super tankers, pipelines continue to be a vital link in oil's journey from the wells to the refinery. The newest oil pipeline runs across 800 miles of Alaskan wilderness. It ends at the port of Valdez where the oil is then loaded onto tankers and shipped to West Coast refineries.

The Alaskan pipeline stirred much heated debate. People opposing the pipeline saw it as a threat to America's last frontier. Building the pipeline across Alaska means that large numbers of workers and massive equipment and materials must be moved over the land. Disturbing vegetation and soil on the tundra can cause permanent scars. Tractor scars made thirty years ago still remain clearly visible. It is said that a footprint made on Arctic land can last one hundred years unchanged. Running back and forth upon one route causes the vegetation to compact. This packing of plants results in loss of food for animals. On this sensitive land vegetation, birds and other forms of life exist in a delicate balance.

Large quantities of gravel are needed for foundations of buildings, road and air strips. Removal of gravel from stream beds, shorelines, and ridges contribute to erosion and silting. Huge pits will be left where the gravel was extracted. The pipeline's path also erodes, causing severe silting of streams.

Pipelines also offer a convenient method for transporting coal. Coal from the mine is crushed and mixed with water (to form a "slurry"), and is then pumped to electric power plants. With the shortage of railroads, coal "slurry" pipelines can help to solve the problem of carrying coal. However, vast amounts of water are required. The large pumps can draw over 1,500 gallons of water each minute. This poses a problem in arid areas. If the water is drawn from wells it can lower the water table. In these areas natural vegetation is lost if the water table is lowered appreciably.

Pipeline acidents are also a major concern. Several mishaps have already occured with the Alaskan pipeline. Pipeline leaks have spilled thousands of barrels of oil over the land. One pumping station has been destroyed by an explosion and fire.

Dams

Dams are built to serve many purposes. Their hydroelectric plants generate needed electricity. Water is held back to prevent flooding as well as to provide for times of water scarcity. Many areas without sufficient rainfall have been transformed into lush gardens because of the irrigation waters from the dams. Lakes created by dams provide new recreational facilities.

However, many land changes result from dam construction. Often a system of dikes is built all along the river to direct the flow of water. But in doing so, these dikes prevent the natural seepage of water onto the surrounding areas. Also, hundreds or thousands of

*David Sheridan. "A second Coal Age promises to slow our dependence on imported oil," *Smithsonian, 8,* August 1977, p. 31.

acres are set aside for use as a conservation pool. This land may be under water half the time. In many cases, these lands were once very fertile farm lands. In other cases, these lands are natural wilderness and homes for many animals and plants.

Man-made structures are not without fault. In recent years, as many of our dams have grown older and not properly maintained, we find an increasing number "giving way," destroying property as well as taking lives. We may wonder whether those previous benefits are worth the later consequences.

Therefore, as we apply our technology to serve some of our needs, we should also recognize some of the possible problems that can arise. Advantages must be weighed against disadvantages when we make our choices.

Activity 10: Can You Get by With Less?

The preceding reading describes briefly a few of the consequences that result from our modern way of life. Our modern life depends on an abundance of natural resources. We have been able to obtain these resources in large quantities with new and powerful tools. Yet, in doing so, we have drastically changed the environment. Some of the changes include huge ugly scars on the land or destruction of the habitat of plants and animals. In fact, our way of life has been responsible for the disappearance of many species of animals.

It may be possible to reduce some of the damaging effects by changing a few of our activities.

On Worksheet 8 to be distributed by your teacher, do the following:

- Select one of the topics — *Strip Mining, Pipelines* or *Dams*.
- Make a list of your activities or things you use that depend upon that resource. For example: pipelines bring us natural gas and petroleum. We use natural gas to heat hot water. Gasoline to run our trucks and cars comes from petroleum. Plastics, nylon and dyes are petroleum products.
- If you had to give up some of those items, which ones would you select? Select three of those items and circle them.
- In the column titled "Substitution" explain what you would do or use in its place. Try to think of a replacement that does not depend on modern high technology or a nonrenewable resource. (A nonrenewable resource is one which when used is not readily produced again. Wood, for example, is a renewable resource, whereas petroleum is a nonrenewable resource.)
- On the bottom of the worksheet, briefly explain how your lifestyle might change when you changed those activities or used a different product. Will your life become more convenient? Less convenient? How might the change affect the environment in which you live?

Activity 11: Pipelines, People and Wildlife — A Case Study

Continental Gas Company has submitted a proposal to the government to construct a series of gas pipelines from the tundra of Alaska through Canada to several metropolitan areas in the U.S. Some people feel that such a project would be extremely harmful to the wildlife and natural vegetation of the area. Others feel that our needs for additional supplies of gas have reached a crisis level. They feel that such a project is justified.

What do you think?

Read the following article, *The Tundra and Its Inhabitants*, for some background information about the situation.

Activity 10: Can You Get By With Less?

Products or Activities that Depend Upon (coal) (dams) (pipeline)	Substitution
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Lifestyle changes:

THE TUNDRA AND ITS INHABITANTS

Largely because of dryness and cold, the interior of Alaska has fewer dense woods and more open spaces than southern and southeastern Alaska. The stands of skinny trees are often scattered and broken, reaching no higher than the moose or a man. The unforested tundra areas (land without trees) are covered by lichen, moss, grass, small flower plants and shrubs.

The tundra is alive and green for a short time, about two months every year, after having been frozen solid for nine or more months.

Ground-hugging lichen, moss and plants spread like a carpet over the tundra making insect and animal life possible. This living carpet insulates the tundra from direct sunlight and prevents drying so that the permafrost that lies less than two feet below the surface does not melt. If the surface dried and cracked, life that depends upon a healthy tundra would be driven away.

The struggle for survival during this short growing season is a phenomenon. Here on the wide open tundra one can easily observe the links in the chain of life. The first link is the sun which gives light and energy. The second link is the vegetation that draws upon the sun's energy and converts it through photosynthesis into energy of its own. The third link consists of those creatures that feed upon the plants. The fourth link consists of the creatures that consume the plant eaters.

Since the northern sun shines strongly only part of the year, this transfer of the sun's energy reflects a simple equation — the fewer days of sunshine there are, the fewer plants there can be; the fewer plants that grow, the fewer the animals there will be; the fewer the animals, the less food to feed people. The simplicity of this food chain makes it extremely sensitive. Any break in the chain can do great or irreparable damage to the whole system. This is why the tundra is referred to as a "fragile realm".

On this "fragile" land have lived people for over ten thousand years. They have learned to brave the harsh cold and to skillfully hunt and fish for food. Yet, their presence has left the land little changed. A harmony and balance exist between the people and the land that provides for them.

Life of the Eskimo, even today, depends on living off the land and sea. Food from the sea includes whales, seals, salmon and walrus. The land offers meat from caribou, moose, reindeer, ducks and geese. And, during the summer months, berries and greens are gathered. Through the centuries, the Eskimo has developed a highly specialized knowledge of the land and its creatures. For them it is important to know the caribou's habits, the texture of the snow, and insect populations. Without this knowledge, they would not be able to follow the caribou or bird migration. Food for the long, cold winters (temperatures fall 30 or 40 degrees below zero) depends on successful hunts.

The human body burns up much energy in the cold weather. Hence large amounts of meat and oil are essential to the diet. Seal or whale oil is an especially important part of the winter meal. One must, therefore, become very skillful in stalking, killing and recovery of the animals. Also, skills are required in preparing and utilizing all parts of the animals. When the weather prevents hunting activities, there must be enough in the food stores.

Similar to the American Indian, the Eskimo society is a close kinship or clan and family oriented society. Everyone works and supports one another. For the whale or caribou hunt, everyone in the village joins in the preparation. When the hunters return, the meat is divided among all the villagers. Distribution of meat and fish are also part of ceremonies at major feasts during the year. These ceremonies of sharing symbolize the communal nature of the village. No one hunts alone or keeps the products of the hunt for oneself.

Today's Eskimo has adopted some products of modern technology. Motor boats, snowmobiles and guns have replaced the traditional seal boats, dog sleds and harpoons. Some clothing and food are "store bought." For the most part, Eskimo culture continues to be "subsistence" culture. Most of what the people need comes from hunting and gathering. They can get by with very little money.

The more important aspect of the hunt is that it forms the basic part of the Eskimo culture and its customs. Their festivals and feasts are celebrations of the hunt. Their art and crafts depict the animals they hunt. The unique skills and knowledge that they have gained through the ages are designed for hunting. For example, Eskimos have a more acute sense of direction than most other people. They think nothing about setting off on a hundred mile trip in the dark of winter across the rugged, roadless terrain.

Disturbance in plant and animal populations can seriously affect the Eskimo lifestyle. Without sufficient wildlife, they cannot sustain their traditional ways and their rich heritage will become lost.

New constructions and development in Alaska can pose a threat to a hunting subsistence culture. A project such as a pipeline will require thousands of workers. New towns will spring up. Roads will be built. Giant pieces of machinery will be brought in. More airports will be constructed. These activities can disturb the nesting grounds of birds, food source of the caribou. If the animals decline in numbers, the Eskimo can no longer continue to live in their traditional style.

Viewpoints and Questions

- Read each of the following points of view carefully. Select the viewpoint that you find *most appealing*. Using the information presented in the readings as well as other additional information, prepare an "argument" *supporting* the point of view you *agree with most*.

- Meet with other members of the class who have selected the same viewpoint. In small groups (3 to 5 members each) develop a group presentation. The questions that follow should help you to develop your argument.

- Each member of the group will present different aspects of the argument to the class. The presentation should be about 10 minutes in length.

- The class will meet to hear the presentations. After all the presentations are given, the class will select the most convincing argument.

Viewpoint 1: (Neil Spooner, Spokesperson for the Committee for Environmental Preservation)

"The pipeline will go across the national wildlife refuge. Since the pipeline must be built above the ground, the migration path of the caribou will be blocked. If their path to food is blocked, these herds will be endangered. This project will also disturb the breeding grounds of many birds. It has been estimated, for example, that the lives of 140 species of birds will be disrupted. Once a species of plant or animal is completely destroyed, it can never be brought back again. It is gone forever.

"The tundra is such a fragile and sensitive area. Any disruption – no matter how small – will result in permanent damage . . . scars that can never be repaired. Also, this is one of the few natural wilderness areas still available for people to see. It must be preserved as it now exists."

Questions

- Why should the preservation of natural lands and wildlife be of any importance to people?
- Should people risk the permanent loss of a rare species of animal to obtain a needed energy resource? Why or why not?
- Should people risk the permanent loss of a rare species of plant to obtain a needed energy resource? Why or why not?
- Should nature be considered as existing only for people's benefit? Why or why not?
- Do animals have the same rights as people to natural resources? Why or why not?

Viewpoint 2: (Jason Spats, Spokesperson for the Committee for Energy Exploration)

"America needs fuel that is clean burning and inexpensive. The gas fields in the northern artic can provide such a resource. We can no longer be controlled by foreign oil and gas producers who, at their slightest whims, can raise fuel prices to any level. Whenever resources become scarce, who will suffer from the unfair burden? The rich can afford to pay any price for heat. How, on the other hand, can those who can barely afford to put food on the table expect to bear the increased burden of higher heat bills? Besides, we must get the gas that exists in the Arctic Tundra if we want to maintain our country's growth and prosperity."

Questions

- How can we best insure that our country has a continuous source of energy?
- Should our country make every effort to develop its own resources even though it may have undesirable effects on the environment?
- Is it fair for people to be charged higher prices for resources when they become scarce?
- Why should our nation make every effort to become less dependent on foreign energy resources?
- During times of energy shortages, how should the limited supplies of natural gas be allocated?

Viewpoint 3: (Beverly Hatch, Eskimo and resident in the Arctic Tundra region)

"Our ancestors lived here for many, many centuries. Our surroundings may, in your view, be hostile, cold, and useful only for the resources it contains. To me and my people, however, it is our home. These are our hunting grounds and contain our life support sources. What will become of us if you come into our homeland and begin to dig it up and scar it forever? Why must you ruin what we have so that you can continue to live in modern comforts?"

Questions

- Should people who have scarce resources share them with others who also need them? Why or Why not?
- Why should it be important for people to try to preserve their way of life?
- Is it right for people living in our area to ask others to make sacrifices so that they can enjoy the comforts to which they have become accustomed?
- If installing the pipeline and extracting the natural gas from the Artic Tundra has an undesirable effect on the lives of the Eskimos, who should be held responsible for their welfare? Why?
- Should the Eskimos consider giving up their "old" way of life and adopt the ways of the modern world? Why or why not?

Activity 12: Coal, People and Land — A Case Study

As the U.S. oil resources are quickly dwindling, coal has become again an important resource for generating electricity. Vast deposits of coal lie under the land in the southwestern United States and can be easily mined using modern strip mining methods. Much of this coal is found on Indian reservation lands. Recently an Indian tribe in Arizona has been approached by a mining company wanting to lease part of the land for its mining operatings. Although leasing this valuable land will provide much needed income, many elders in the tribe fear that permitting coal mining will drastically change their sacred land as well as change their traditional way of life.

Do you think that the Indians should lease their land?

Read the following article which briefly summarizes some current concerns regarding coal.

THE COAL FIELDS AND THEIR INHABITANTS

"The first coal age began in wood-poor England and Scotland in the latter half of the 18th century and spread from there to the Continent and the United States, providing the fuel for the Industrial Revolution. By 1910, it was supplying 80 percent of our energy. That same year oil and gas surpassed wood as a fuel, and coal began to decline. Unable to complete, bulky, dirty coal petered out by midcentury, providing only 18 percent of our energy.

"Now we are embarking on a second coal age, one that will surpass anything seen in the first in terms of tons produced. President Carter wants to double output by 1985, to well over a billion tons a year. Coal cannot solve our energy problems, despite the "Dig We Must" newspaper ads, but it certainly can help.

". . . Despite the terrible costs of digging and burning coal, it does possess one redeeming characteristic – there is a lot of it. That is very important at a time when Americans are consuming natural gas and oil faster than they can find and produce it, and when technical as well as social problems continue to plague nuclear power. Beneath the wooded hills and hollows of Appalachia, the corn and hayfields in the Midwest, the rolling grasslands of the Northern Great Plains and the arid plateaus and dry creeks of the Southwest lie vast beds of coal. This is an energy resource far richer than the much-heralded oil fields of Alaska or the North Sea. It is more extensive than the huge Persian Gulf oil deposits. Even if the United States were seriously to conserve energy – that is, substantially reduce its energy waste – increased coal production would be necessary. Coal represents 90 percent of the nation's remaining fossil fuel reserves."[1]

[1]This excerpted selection is reprinted from "A second Coal Age promises to slow our dependence on imported oil." by David Sheridan, *Smithsonian*, Vol. 8, No. 5, August 1977. Copyright 1977 Smithsonian Institution.

Huge coal deposits are located in the Black Mesa of Arizona, a joint Navajo and Hopi area. The Old Navajo believe that the Black Mesa is the body of the Earth Mother. The power shovels would inflict cruel damage to it. The Hopi, who believe they are her guardian, have shrines here. According to Hopi elders, "This land was granted to the Hopi by a power far greater than man can explain. Title is vested in the whole make-up of Hopi life. The land is sacred and if the land is abused, the sacredness of Hopi life will disappear and all other life as well."

Old Arabi, a village on the mesa, is the oldest inhabited village in the U.S. As far back as the 1100's, the natives have lived here, farming, fishing and hunting. Water that is drawn from wells to transport the coal can threaten their farms. (Water is not abundant here.) Although the Indians will receive money for the coal, the village elders are opposed to coal mining. They believe that while money comes quickly, it is quickly spent and gone. Land, on the other hand, remains forever. But if the land is torn and water taken out, the people will no longer be able to depend on farming for their livelihood.

However, to the less traditional Indians, the promises of money and jobs is highly attractive.

Viewpoints and Questions

- Read each of the following points of view carefully. Select the viewpoint that you find *least appealing*. Using the information presented in the readings as well as other additional information, prepare an "argument" *supporting* the point of view you *disagree with most*.
- Meet with other members of the class who have selected the same viewpoint. In small groups (3 to 5 members each) develop a group presentation. The questions that follow should help you to develop your argument.
- Each member of the group will present different aspects of the argument to the class. The presentation should be about 10 minutes in length.
- The class will meet to hear the presentations. After all the presentations are given, the class will select the most convincing argument.

Viewpoint 1: (Frank Talbert, President of Argyle Mining Co.)

"American society today runs on electricity. If we are to continue to live the way we do, we must have sufficient electricity. There is no getting around it. The great reserves of coal in our western states will be able to supply fuel energy for hundreds of years.

"We will not be taking lands away from anyone. All we want is to mine the coal underground. It is no good to anyone just sitting there. Besides, our company will be paying the Indians a good sum of money for the right to the coal. Our mining operations will also be good for the economy of the area. We will be hiring workers and jobs will be given to many of the Indians who are now unemployed. The employees will be spending money on housing, food and clothing. Think of what this will mean to your area."

Questions:

- Should our need for electricity be the most important reason for strip mining the Indian lands? Why?
- Should the Indians be asked to share their coal with the rest of the country? Why?
- How should we determine the amount of money to be paid to the Indians for permission to mine the coal?
- Which is more important, more jobs or preserving the environment? Why?
- Since the President has recommended using more coal rather than other sources of energy, do we have a choice other than mining coal wherever we can find it? Why?

Viewpoint 2: (Tribal Leader Louis Naha)

"I have many strong feelings about mining our tribal lands. Strip mining will leave permanent scars on our Mother Earth. Man and Earth are all one. To do damage to Earth is to damage part of ourselves. Our grazing areas will no longer provide food for our cattle. We may not become rich raising our few cows, but this is our way of survival — our way of life. What will we do if we can no longer raise cattle?

"You want our young men to operate your machines but what kind of work is that? You want them to destroy the land that provides them with life, food, water, and beauty. Mining and your kind of work will only bring more people to our area to help destroy our lands even faster and destroy our way of life faster."

Questions:

- Which is more important, preserving one's culture, religion, and way of life or opportunities to make more money and perhaps obtain modern conveniences? Why?
- Are the Indians being selfish in not wanting to share the coal? Why or why not?
- Are we being greedy and/or selfish in asking the Indians to give up their resources for us? Why?
- Of what value is land if it is not used to help make our lives better and more convenient?
- Shouldn't the payment of money in exchange for the use of their lands and resources really be enough for the Indians? Why or why not?

Viewpoint 3: (Congressman Jesse Williams)

"As Congressman for this district, I must look out for the interest of all people living here. Some people think that the Indians need hospitals, schools, and jobs. The Indians may or may not agree with this. They say, for example, that their ancestors did quite well without the white man's ways so why should they change now? Yet, I look around and see the Indians today in this area with barely enough to eat, inadequate housing, clothing and schools.

"On the other hand this area is rich in coal which is badly needed across our country so that we can have

needed electricity. But where will it all end? The more electricity that we have the more we want. Yet, I know that the need for the coal is in the 'national interest.' Without sufficient energy even our national security may be threatened. Despite the Indian problem, however, I can't deny the needs of our nation. I must find a way to bring the Indians to understand why we must have the coal."

Questions:

- Should the progress of our nation be held back because there is not enough electricity? Why or why not?
- Mining the Indian land will affect Indian life styles in many ways. (a) Think about this and list several ways that Indian life styles might be affected. (b) Is it right to influence the Indians to adopt modern ways?
- Shouldn't the Indians want to see their villages improved, e.g., new roads, electric power lines, modern buildings, etc.
- In this day of industry and technology is it possible for people to ignore modernization and live as people did hundreds of years ago?.
- Are the rights of the Indians threatened since they are but a small number among the total population? How should their rights be best protected?

Activity 13: Changing Times

Instructions:

In this activity you will look at some of the changes that have taken place in the *family, education* and *land* since the 1700's. Select one of the topics — *family, education* or *technology* and complete the chart for that topic.

Your teacher will distribute to you the chart of your choice.

- On each topic chart are a series of items to be considered. For each item indicate in the proper space how this took place during each of the different time periods. For example:

Family	Time of American Indian	Time of Grandparents	You (Now)	Future
Leisure Time	Story Telling	Reading: listening to radio	Watching TV	Computer Games

- For information about what occurred during your *grandparents' time,* interview them or someone of a similar age. For the *future time* you will simply have to rely on your imagination and think about some of the new inventions that may change the way we do things now.

- After you have filled out the chart compare what happened from one time period to the next. That is, what do you think were major differences in the types of activities? Was a new technology or invention responsible for this change? If so, what was this technology or invention? Answer this in the column under "Technological Event" (the shaded columns). For example, radio entertainment during your grandparents' time was made possible because of discoveries and technologies such as: electricity, radio waves, vacuum tubes, assembly lines, etc.

- Meet with other class members who completed the same chart. Compare and discuss your results. Prepare a summary of your findings for presentation to the entire class.

STUDENT HANDOUT NINE

Changing Times: FAMILY

Aspects of the Family	Early Amer. Indian Time	Technological Events	Grandparents Time	Technological Events	You (Now)	Technological Events	Future (your predictions for the year 2050)
Family Members in Household							
Activities in which all family members take part							
Use of Leisure Time							
Holidays & /Celebrations (How celebrated by family) Give 2 examples							
Types of Family Decisions							
Other							

STUDENT HANDOUT TEN

Changing Times: EDUCATION

Aspects of Education	Early Amer. Indian Time	Technological Events	Grandparents Time	Technological Events	You (Now)	Technological Events	Future (your predictions for the year 2050)
Where does education take place?							
Who teaches?							
What is learned?							
How taught?							
Special skills needed							
Major purpose of education							

STUDENT HANDOUT ELEVEN

Changing Times: LAND

Aspects of Land	Early Amer. Indian Time	Technological Events	Grandparents Time	Technological Events	You (Now)	Technological Events	Future (your predic-tions for the year 2050)
Feelings about the land							
Direct activities with land							
Use of land resources							
Type of Man-Made Structures on Land							
Owners of the land							
Other							

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